THE FIRST WEST COAST COMPUTER FAIRE

A Conference & Exposition on

Personal & Home Computers

PROGRAM

april 15-17, 1977 · san francisco

©77-1-10 by Computer Faire

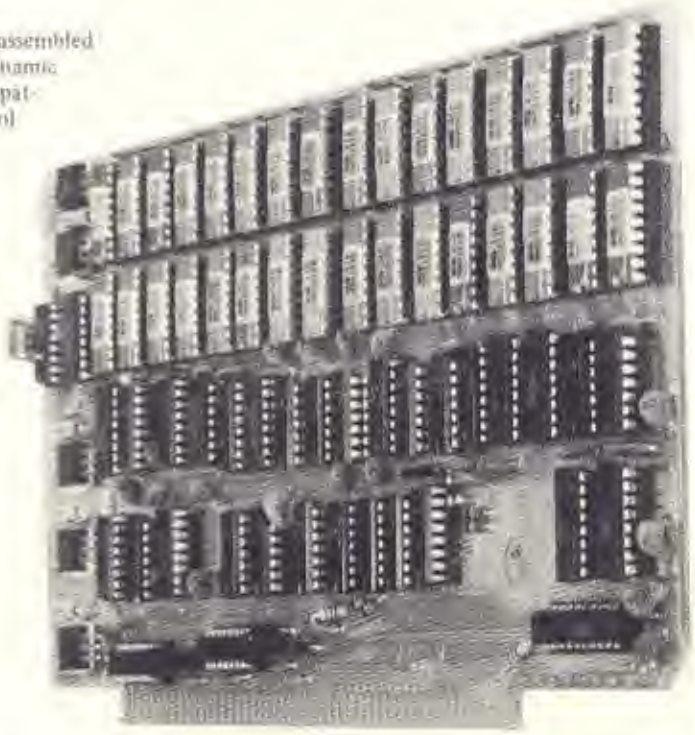
BOX 1579, PALO ALTO CA 94302 □ (415) 851-7664

16384 BYTES for $485.00

assembled (with sockets) : tested - burned-in - guaranteed

A new high in S100 bus memory cost effectiveness. Fully assembled (with sockets), tested, burned-in and guaranteed, 4Kx1 dynamic memory chips (the same ones used by the ton in IBM compatible memory systems) combined with self contained control logic, yield a memory system with these features:

- Low power consumption, total board 5 watts.
- Transparent refresh, which means the memory looks static to the outside world.
- No waiting. In fact, XRDY is not even connected to the memory.
- Full DMA capability.
- Reliable, low level clock and control signals.
- Three full days testing at 70° C (185° F).



BOOTH 200 & 301

SPECIFICATIONS

Capacity:	16384 bytes
Addressing:	16K boundaries
Bus structure:	S100 - Plug compatible with IMSAI 8080, POLY 88, ALTAIR 8800, BYTE-8, SOL
Address and Data Buffering:	<200 uA, special high impedance buffers - less than one low power Schottky load
Access time:	350 nSec
Memory chips:	MM 5271 (National Semiconductor and others) 4K dynamic

Dynabyte

Dynabyte® brings to the S100 Bus a state of the art, industrial quality memory system. 16K on a single board for $485.00. Guaranteed for 1 year.

THE FIRST WEST COAST COMPUTER FAIRE

HELD IN

San Francisco's Civic Auditorium

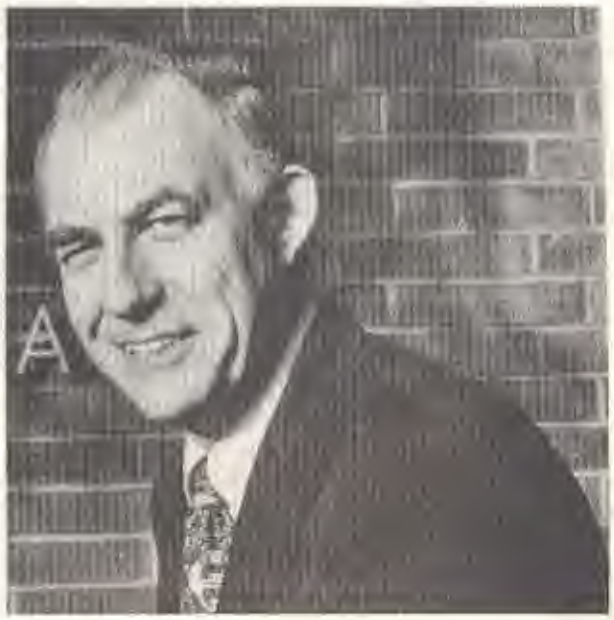
WITH

Banquets in the St Francis Hotel

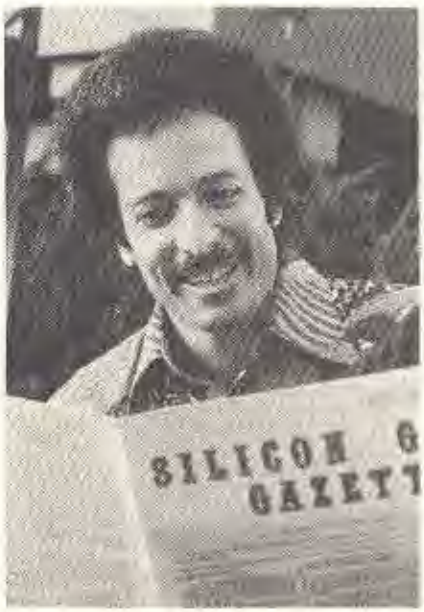
April 15-17, 1977

COMPUTER FAIRE
Box 1579
Palo Alto CA 94302
(415) 851-7664

JIM WARREN, Faire Chairperson
&
Editor, *Dr Dobb's Journal of Computer Calisthenics & Orthodontia*
People's Computer Company
Box E
Menlo Park CA 94025



ROBERT REILING, Faire Operations Coordinator &
Editor, *Homebrew Computer Club Newsletter*
Homebrew Computer Club
Box 626
Mountain View CA 94042



RICK BAKALINSKY, Wandering Minstrel
&
Midwife-at-Large; Explorer
2464-1 W. Bayshore, Sweet 1
Palo Alto CA 94303

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PRIZES CONTRIBUTED BY EXHIBITORS

(as of 4:10 a.m. on 77 April 7)

The following products have been donated by the indicated vendors to be awarded for the best homebrew exhibits, and to be given away as door prizes at the Faire banquets, and convention, (as of April 2nd).

Announcements of the winners of each prize will be posted at the contributor's booth, and will also be mailed to the winner. Drawings for the door prizes will take place throughout the Faire, and the winners need not be present to win.

COMPANY	QUANTITY	PRODUCTS	RETAIL VALUE
Midwest Scientific Instruments Inc.	1	MSI FD-8 Floppy Disk System, complete with MSI Disk BASIC & FDOS Operating System	$1500.00
Parasitic Engineering	1	EQUINOX 100 Computer Kit	$ 599.00
& Morrow's Micro Stuff	1	Power Supply Kit (customers choice for either the Altair 8800 or an Equinox 100 power supply)	90.00
	5	Clock Fix Kits for the Altair 8800 ($15@)	75.00
Technical Design Labs Inc.	1	Xitan Alpha I System (kit)	$ 769.00
Cybercom/Solid State Music	1	SB-1 Synthesizor Board for the S-100 Buss	$ 250.00
	1	V8-1A Video Interface for the S-100 Buss	189.95
	5	XB1 Kit ($12.50@)	62.50
Southwest Technical Products	1	GT-64 Terminal with matching monitor	$ 495.00
Computalker Consultants	1	Model CT-1 Speech Synthesizor Board	$ 395.00
XIMEDIA Corporation	5	OAE Tape Readers ($75@)	$ 375.00
North Star Computers, Inc.	1	Hardware Floating Point Board Kit, including Compatible version of North Star BASIC.	$ 359.00
GIMIX, Inc.	10	Gimix Gobblers ($30@)	$ 300.00
MINITERM Associates	1	MERLIN Video Interface Kit	$ 269.00
ROM: Computer Applications For Living	2	Lifetime subscriptions to ROM: Computer Applications for Living ($250.00@)	$ 500.00
VECTOR Graphic, Inc.	5	Motherboards ($49@)	$ 245.00
Polymorphic Systems	1	Video Terminal Interface Kit	$ 210.00
MINI-MICRO Systems Magazine	4	CORVUS Slide Rule Calculator ($50@)	$ 200.00
MECA	1	MECADRIVE	$ 200.00
Godbout Electronics	1	BASIC RAM kit (use with "JOLT", etc.) 4kx8	$ 88.00
	1	ECONORAM Kit (use with Altair/Imsai S-100)	99.95
Smoke Signal Broadcasting	1	P-38 8K EPROM Board	$ 179.00
Hayden Book Company, Inc.	10	BASIC BASIC ($7.95@)	$ 79.50
	10	Microprocessor BASICS ($9.95@)	99.50
Tarbell Electronics	1	Tarbell Cassette Interface Kit	$ 120.00
	2	Tarbell Prototype Boards ($28@)	56.00
BYTE Publications Inc.	1	Lifetime subscription to BYTE magazine.	$ 150.00
Component Sales, Inc.	1	Burroughs SELF-SCAN	$ 150.00
IASIS, Inc.	1	Microcomputer Design Course (6 volumes)	$ 99.50
	5	Microcomputer Applications Handbooks ($7.95@)	39.75
Jade Company	2	2708 (8K E-PROM) ($40@)	$ 80.00
	16	2107B-4 (4k Dynamic RAM) ($3.625@)	58.00
Scientific Research	1	Set of all 5 volumes of BASIC Software library	$ 109.75
Technical Systems Consultants	1	TSC Text Editing System-6800	$ 23.50
	1	TSC Micro Basic Plus-6800	15.95
	1 ea.	Package I for 1)6800, - 2)6502, - 3)8080 ($20@)	60.00
Oliver Audio Engineering Inc.	1	OP-80A Paper Tape Reader Kit	$ 74.50
Digital Research	1	CP/M System Diskette & Documentation	$ 70.00
Logical Services Inc.	1	Modu-Learn Microcomputer Software Course	$ 49.95
PAIA Electronics Inc.	1	8780 Equally tempered D/A (for music)	$ 34.95
PMS Publishing Company	5	The Underground Buying Guide ($5.95@)	$ 29.75
Sunset Technologies	1	Gift Certificate	$ 25.00
Creative Computing	1	The Best of Creative Computing, Vol.II	$ 8.95
	1	101 BASIC Computer Games	7.50

Prize Contribution Update as of 4:10 a.m. on 77April 7

Dymax	12	1-year subs to *Calculators/Computers Magazine* ($12@)	$144.00
Parsec Electronics	1	Main board & keyboard enclosures for SWTPC 6800 m-p	$ 49.95
	1	Printer cover for SWTPC PR-40 Printer	$ 14.95
Pfeiffer, E & L	10	Hexadaisy Hexadecimal Sliderules ($3.95@)	$ 39.50

CP/M

LOW-COST MICROCOMPUTER SOFTWARE

CP/M is a low-cost control program for microcomputers which brings together recent advances in computer and peripheral technology. CP/M is an advanced disk operating system designed for use with IBM-compatible diskette-based computer systems which employ the Intel 8080 microcomputer. Previously available only to OEM's, CP/M has been in existence for over three years in various manufacturers' products, and has undergone extensive field testing. The functions of this software package include named dynamic files, program editing, assembly, debugging, batch processing, and instantaneous program loading, resulting in facilities similar to popular timesharing services. CP/M is an 'unbundled' software package which can be easily adapted to any 8080 or Z-80 computer system with at least 16K of main memory and one or two IBM-compatible disk drives. The field-modification manual provided with CP/M has been used successfully by many CP/M users in customizing CP/M for their own hardware configurations.

DIGITAL RESEARCH

Please send me the following:

☐ **CP/M Documentation** (Complete set of 6 manuals) for **$25.00.**

☐ **CP/M Documentation** and **CP/M System Diskette** for **$70.00.**

☐ Free **CP/M brochure** and **price list.**

☐ **Information** concerning high level languages and optional packages.

NOTE: IMS Associates and Digital Systems distribute CP/M with their hardware systems.

☐ Bank Americard No. _____ Exp. date _____ ☐ Master Charge No. _____ Exp. date _____ ☐ Check or M.O. enclosed.

California residents add 6% sales tax. Amount enclosed _____

Name _____ **Address** _____

City _____ **State** _____ **Zip** _____

DIGITAL RESEARCH Post Office Box 579 • Pacific Grove, California 93950

COMPUTER FAIRE DISCOUNTS OFFERED BY FAIRE EXHIBITORS

(as of 5:45 a.m. on 77 April 7)

(Discounts for which the Faire has written committments, as of April 2nd).

COMPANY	DISCOUNTS BEING OFFERED
MECA	20% discount on all products purchased at the Faire.
Parasitic Engineering & Morrow's Micro Stuff	20% discount on Deluxe Hardware kit if purchased with an EQUINOX-I00 Computer Kit. Clock Fix kit for Altair 8800 for $5.00 with any other purchase.
Smoke Signal Broadcasting	$25.00 discount allowed on items priced over $150.00 ordered or purchased at the Faire. In addition, will be giving away "inflated" wooden nickels worth $5.00 on the purchase of any item. (Limit- 1 per customer.)
XIMEDIA Corporation	12% discount on all our products purchased at the Faire.
	IMSAI I-8080 with TDL ZPU Card (instead of 8080) Cooling fan, 22 slot motherboard with 22 pre-soldered Connectors, 44 card guides, $ 999 Kit or, $1295 assembled
Cybercom/Solid State Music	SB-1 Synthesizor board for the S-100 bus. Retail: $250 Faire Discount: $220
Realistic Controls Corporation	RCC Z//25 FORTRAN IV-MINIFLOPPY Kit. Retail: $1095 Discount: $995
Computalker Consultants	10% discount on all items purchased at the Faire.
Digital Research	10% discount on all CP/M documentation purchased at the Faire.
Logical Services, Inc.	10% discount on all products purchased at the Faire.
Midwest Scientific Instruments Inc.	10% discount on all products purchased at the Faire.
MINITERM Associates	10% discount on all products purchased at the Faire.
SAC Sales Group	10% discount on all products ordered at the Faire.
Sunset Technologies	10% discount on all products purchased at the Faire.
VECTOR Graphic Inc.	10% discount on all products purchased at the Faire.
Video Terminal Technology	10% discount on all products purchased at the Faire.
Scientific Research	10% discount on purchases of complete sets of the 5 volumes of BASIC software library.
EXTENSYS Corporation	6% discount on all products purchased at the Faire.
Computer Magazine (IEEE Computer Society)	Computer Society Publications offered at member discount prices.
ROM: Computer Applications For Living	Premier issue of ROM free with subscription purchased at the Faire. This is a Faire exclusive.
Creative Computing	Extra issue of Creative Computing free to subscribers and renewers. Discounts on purchasing 3 or more Creative Computing books.

Discount Update as of 4:10 a.m. on 77April 7

Advanced Technology Research Assoc.	Blinkies (multi-faceted LED pendants. Retail: $39.99. Faire Discount: $29.95.
Board Byters	10% discount on all products purchased at the Faire.
Dymax	50% discount on cash orders for $500 or more, for any combination of the following books: *Instant BASIC, Your Home Computer, My Computer Likes Me, Games with the Pocket Calculator, Games, Tricks, & Puzzles for a Hand Calculator.*
Gnomon Associates	15% discount on all products purchased at the Faire. Gnomon Cassette Controller. Retail: $69.95. Faire Discount: $59.46.
Hal Communications Corp.	5% discount on all products purchased at the Faire.
Bell & Howell Schools	10% discount on all products purchased at the Faire.
Integrand Research Corp.	20% discount on cabinet for computer terminal (TVT-2)
National Semiconductor Corp.	10% discount on all products purchased at the Faire. 30% discount on m-p product literature packages Free SC/MP or PACE m-p chip given with purchase of SC/MP or PACE literature package
Parsec Electronics	15% discount on all products purchased at the Faire.
Pfeiffer, E & L	Hexadaisy Hexadecimal Sliderule. Retail: $3.95 + tax. Discount: $3.75 (incl. tax).
R.D.C. Enterprises	30% discount on all products purchased at the Faire. Compu/Time CT100 Kit. Retail: $195. Faire Discount: $150. C101. Retail: $147. Faire Discount: $115. T102. Retail: $160. Faire Discount: $125.
Vandenberg Data Products	Vandenberg Data Products 16K Memory kit for S-100 bus. Retail: $385. Faire Discount: $308 (plus tax and shipping)

Meet the most powerful μC system available for dedicated work. Yet it's only $595.*

*kit price

Here's the muscle you've been telling us you wanted: a powerful Cromemco microcomputer in a style and price range ideal for your dedicated computer jobs—ideal for industrial, business, instrumentation and similar applications.

It's the new Cromemco Z-2 Computer System. Here's some of what you get in the Z-2 for only $595:

- The industry's fastest μP board (Cromemco's highly regarded 4 MHz, 250-nanosecond cycle time board).
- The power and convenience of the well-known Z-80 μP.
- A power supply you won't believe (+8V @ 30A, +18V and −18V @ 15A — ample power for additional peripherals such as floppy disk drives).
- A full-length *shielded* motherboard with 21 card slots.
- Power-on-jump circuitry to begin automatic program execution when power is turned on.
- S-100 bus.
- Standard rack-mount style construction.
- All-metal chassis and dust case.
- 110- or 220-volt operation.

DEDICATED APPLICATIONS

The new Z-2 is specifically designed as a powerful but economical dedicated computer for systems work. Notice that the front panel is entirely free of controls or switches of any kind. That makes the Z-2 virtually tamper-proof. No accidental program changes or surprise memory erasures.

FASTEST, MOST POWERFUL μC

Cromemco's microcomputers are the fastest and most powerful available. They use the Z-80 microprocessor which is widely regarded as the standard of the future. So you're in the technical fore with the Z-2.

BROAD SOFTWARE/PERIPHERALS SUPPORT

Since the Z-2 uses the Z-80, your present 8080 software can be used with the Z-2. Also, Cromemco offers broad software support including a monitor, assembler, and a BASIC interpreter.

The Z-2 uses the S-100 bus which is supported by the peripherals of dozens of manufacturers. Naturally, all Cromemco peripherals such as our 7-channel A/D and D/A converter, our well-known BYTESAVER with its built-in PROM programmer, our color graphics interface, etc., will also plug into the S-100 bus.

LOW, LOW PRICE

You'll be impressed with the Z-2's low price, technical excellence and quality. So see it right away at your computer store—or order directly from the factory.

Z-2 COMPUTER SYSTEM KIT (MODEL Z-2K) (includes 4 MHz μP card, full-length 21-card-slot motherboard, power supply, one card socket and card-guide set, and front panel; for rack mounting) . . . . . $595.

Z-2 COMPUTER SYSTEM ASSEMBLED (MODEL Z-2W) (includes the above as well as all 21 sockets and card guides and a cooling fan; for rack mounting) . . . $995.

Shown with optional bench cabinet

Cromemco
incorporated
Specialists in computers and peripherals
2432 CHARLESTON RD., MOUNTAIN VIEW, CA 94043 • (415) 964-7400

CONFERENCE PROGRAM

TUTORIALS FOR THE COMPUTER NOVICE

Saturday, 9:00 AM
Larkin 103

James S. White
1202 Riverview Lane
Watertown WI 53094

An Introduction to Computing to Allow You to Appear Intelligent at the Faire

Fred Waters
1601 Provincetown Drive
San Jose CA 95129

A Tyro Looks Back

Richard J. Nelson
2541 W. Camden Place
Santa Ana CA 92704

The Shirt Pocket Computer

Lowell Smilen, Ph.D.
Almal/Stroum Electronics
5811 Sixth Avenue South
Seattle WA 98108

The Sidelobes of Industrial Distribution are Focused on the Home Microcomputer Hobbyist

PERSONAL COMPUTERS FOR THE PHYSICALLY DISABLED

Saturday, 1:30 PM
3 D

Peter J. Nelson & J.G. Cossalter
Medical Engineering Section, Bldg. M-50
Division of Electrical Engineering
National Research Council of Canada
Ottawa Ontario
Canada K1A OR8

The Potential of Microcomputers for the Physically Handicapped

Laurence R. Upjohn, Pharm. D.
7297 Stanwood Way
Sacramento CA 95831

An Interface Using Bio-Electrical Signals to Control a Microprocessor System for the Physically and Communicatively Handicapped

PEOPLE & COMPUTERS

Saturday, 9:00 AM
3 D

Andrew Clement
789 W. 18th Ave.
Vancouver B.C.
Canada V5Z 1W1

If "Small is Beautiful," is Micro Marvelous? A Look at Micro-computing as if People Mattered

Dennie L. Van Tassel
Computer Center
University of California
Santa Cruz CA 95064

The Computer in Science Fiction

David H. Ahl, Publisher
Creative Computing
Box 789-M
Morristown NJ 07960

Computer Power to the People: The Myth, the Reality and the Challenge

Kenneth Berkun
928 J Street
Davis CA 95616

Psychology and the Personal Computer

HUMAN ASPECTS OF SYSTEM DESIGN

Sunday, 1:00 PM
Larkin 103

William F. Anderson
158 Valparaiso
San Francisco CA 94133

The Most Difficult Interface: Human

James Joyce
Computer Science Division
Department of Electrical Engineering and Computer Science
University of California
Berkeley CA 94720

Human Factors in Software Engineering

NOW!!

Z-80 Power for the S-100 bus without getting rid of your CPU card $159.95 assembled

DUTRONICS

8K STATIC LOW-POWER RAM

(KIT)

NORMAL	SHOW SPECIAL
$285.00	$225.00

BOOTH 200 & 301

LEGAL ASPECTS OF PERSONAL COMPUTING

Saturday, 12:30 PM
3 D

Kenneth S. Widelitz, Attorney at Law, WA6PPZ
10405 Louisiana, No. 8
Los Angeles CA 90025

What to Do After You Hit Return . . .And Nothing Happens: Warranty in the Micro-Computer Industry

HERETICAL PROPOSALS

Saturday, 11:30 AM
3 A

Klaus Holtz
310 Guttenberg
San Francisco CA 94112

Here Comes the Brain-Like, Self-Learning, No-Programming, Computer of the Future

COMPUTER ART SYSTEMS, Part I

Saturday, 1:00 PM
Larkin 105

Ronald Pellegrino
701 Del Mar Avenue
Novato CA 94947

An exhibition & discussion:
Composing Dynamic Laser Light Sculptures Via a Hybrid Electronic Wave System

COMPUTER ART SYSTEMS, Part II

Saturday, 2:30 PM
Larkin 105

Rona Gurkewitz
Western Connecticut State University
181 White Street
Danbury CT 06810

ARTSPEAK and Computer Art with BASIC and a Teletype

Michael Fisher, Partner
Multiplex Company
454 Shotwell Street
San Francisco CA 94110

Computer Generated Integral Holography

COMPUTER-DRIVEN VIDEO ART SYSTEMS, Part I

Saturday, 9:00 AM
Larkin 105

William Etra
42 East 23rd Street
New York NY 10010

Digital Control of Analog Video Synthesis Equipment

Dick Shoup
Xerox Palo Alto Research Center
3333 Coyote Hill Road
Palo Alto CA 94304

Digital Video Painting

Terry Craig
Image West
845 N. Highland
Hollywood CA 90030

Electronically Produced Video Graphics Animation

Tom DeFanti, Dan Sandin and Larry Leske
Box 4348
University of Illinois at Chicago Circle
Chicago IL 60680

Roaming Around in Abstract 3-D Spaces

Jo Ann Gillerman
4250 Horton Street
Emeryville CA 94608

Video Synthesis & Performance with an Analog Computer

COMPUTER-DRIVEN VIDEO ART SYSTEMS, Part II

Saturday, 4:30 PM
Larkin 105

Stephen Beck, Electronic Videographer
Beck Videographics
1406 Euclid Ave. No. 3
Berkeley CA 94708

Video Synthesis: Expanding Electronic Vision

Larry Forman, Panel Organizer
1092 Evergreen
San Diego CA 92106

Panel: Computer-Driven Video Systems

CT-64 TERMINAL SYSTEM

- 64 OR 32 CHARACTERS PER LINE
- UPPER AND lower case LETTERS
- FULL 8 BIT MEMORY
- 128 CHARACTER ASCII SET
- 110/220 Volt 50-60 Hz POWER SUPPLY
- SCROLLING OR PAGE MODE OPERATION
- CONTROL CHARACTER DECODING – 32 COMBINATION
- PRINTS CONTROL CHARACTERS
- USABLE WITH ANY 8 BIT ASCII COMPUTER
- REVERSED BACKGROUND – HIGHLIGHTING

COMPLETE WITH – Chassis and cover, cursor control, 110-1200 Baud serial interface and keyboard. Optional monitor show in photo available.

Now you can buy it. The terminal that has all the features that people have been asking us to include. The CT-64 has all the functions that you could want in a terminal and they may be operated by either switches, or through a software program.

All cursor movements, home-up and erase, erase to end of line, erase to end of frame, read on, read off, cursor on, cursor off, screen reversal, scroll, no scroll, solid cursor, blinking cursor, page selection and a beeper to warn you of end of page; all are provided for your use in the CT-64.

You may also switch from upper case only teletype style operation to upper-lower case typewriter style operation. You can reverse the field on individual words to highlight them, or you can reverse the whole screen.

CT-64 is complete with keyboard, power supply serial interface and case. A matching 9 inch monitor with coordinated covers is also available to make a complete system.

CT-64 Terminal Kit	$325.00
MM-1 Monitor (assembled)	$175.00

SWTPC

219 W. Rhapsody

San Antonio, Texas 78216

You are right, it's just what I have been asking for.

☐ Enclose is $325.00 for the CT-64

☐ Send the MM-1 monitor too. ☐ Send Data

☐ or BAC _____ #_____

☐ or MC _____ Ex Date_____

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Southwest Technical Products Corp.
219 W. Rhapsody, San Antonio, Texas 78216

MUSIC & COMPUTERS, Part I

Sunday, 10:30 AM
Larkin 105

Thomas E. Olsen
2500 Medallion Drive, No. 57
Union City CA 94587

A Computer Controlled Audio Generator

Carl Helmers, Editor in Chief
BYTE Publications Inc.
70 Main Street
Peterborough NH 03458

The Kludgehorn: An Experiment in Homebrew Computer Music

Jef Raskin
Box 511
Brisbane CA 94005

A Pipe Organ/Micro Computer System

MUSIC & COMPUTERS, Part II

Sunday, 1:00 PM
Larkin 105

John Chowning and James A. Moorer
Department of Music
Stanford University
Stanford CA 94305

A Tutorial with Musical Examples: The Stanford Computer Music Project

Marc Le Brun
Star Route Box 111
Redwood City CA 94062

Notes on Microcomputer Music

John Snell, Editor
Computer Music Journal
Box E
Menlo Park CA 94025

Design of High Fidelity Real-Time Digital Hardware for Music Synthesis

SMOKING REGULATIONS

For ventilation, health and safety reasons, smoking is allowed only in:
1. The Main Exhibits Arena on the first floor
2. The Polk Hall Exhibits area on the first floor
3. Explicitly designated areas of the Polk Hall Cafeteria & Lounge areas
4. The audience-left half of Larkin 103 & Larkin 105 Conference Halls.

ELECTRONIC MAIL

Saturday, 1:00 PM
Larkin 103

John McCarthy & Les Earnest
Artificial Intelligence Laboratory
Computer Science Department
Stanford University
Stanford CA 94305

DIALNET and Home Computers

Raymond R. Panko, Ph.D.
Stanford Research Institute
333 Ravenswood Ave.
Menlo Park CA 94025

CB Computer Mail?

COMPUTER NETWORKING FOR EVERYONE

Saturday, 3:00 PM
Larkin 103

Lee Felsenstein
1807 Delaware St.
Berkeley CA 94703

Community Memory - a "Soft" Computer System

David Caulkins
Cable Data
701 Welch Road
Palo Alto CA 94304

Design Considerations for a Hobbyist Computer Network

Mike Wilbur
920 Dennis Drive
Palo Alto CA 94303

A Network of Community Information Exchanges: Issues and Problems

MESSAGE CENTER

A "Messages" bulletin board is located in the Main Lobby of the Civic Auditorium. Those wishing to do so may post 3x5 notes on this board in the indicated locations to:

- *establish contact with someone
- *obtain rides or riders
- *share accomodations ("crash pads"?)
- *buy or sell used equipment owned by private parties

EMPLOYMENT EXCHANGE

An employment bulletin board is located in the Main Lobby of the Civic Auditorium. Those seeking employees or employment may post a 3x5 card indicating their desires or capabilities.

TSC's
MULTI-USER SYSTEM
BOOTH 114

Would you believe: 4 1200 baud terminals,
7 different programs, all running at
the same time, on a SWTPC 6800?
Seeing is believing! Stop by TSC's booth, #114.

* * * SPECIAL ATTRACTION * * *

TSC will demonstrate 4-user Micro BASIC Plus
at various times throughout the show!

COMPUTER MUSIC WITH OR WITHOUT THE COMPUTER !

EQUALLY TEMPERED DIGITAL TO ANALOG CONVERTER

The PAIA 8780 kit is based on a multiplying principle that allows the module to generate the exact exponential stair-step function required to make even the simplest linear response oscillators and filters produce equally tempered musical intervals. The 8780 uses only six bits of data to generate over 5 octaves of control voltage. In an 8 bit system the remaining two bits are ordinarily reserved for trigger flags, but may be used to extend the range of the converter or provide micro-tonal tunings.

The module is physically and electrically compatible with the complete line of PAIA music synthesizer modules and is easily interfaced to any micro-processor with or without hand-shaking logic.

#8780 D/A CONVERTER Kit $34.95
(plus $1.00 postage)

THE PAIA HIGH LEVEL LANGUAGE FOR COMPUTER MUSIC DATA ENTRY (We call it a keyboard)

An n key roll-over scanning matrix encoder tied to a 37 note AGO keyboard provides 6 bits of data and both STROBE and $\overline{\text{STROBE}}$ control outputs. Input control lines to the encoder include $\overline{\text{SCAN}}$ (starts and stops encoder clock), RESET, START and RANDOM making the keyboard universally applicable to all computer/processors from the very largest to the very smallest.

Housed in a trim and sturdy vinyl covered road case, the kit consists of all parts including keyboard, power supply and detailed assembly instructions; software overview for computer applications and detailed instructions for Digital Sample and Hold.

#8782 ENCODED KEYBOARD . .$109.95
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WITH A COMPUTER

Both the 8780 D/A and the 8782 Encoded Keyboard easily interface to any processor providing capabilities and control never before possible with music synthesizers.

DETAILS ON THESE & MORE IN OUR FREE CATALOG

PAIA ELECTRONICS, INC.

WITHOUT A COMPUTER

An infinite hold, DIGITAL Sample and Hold and the heart of an entire system of modules that will be introduced over the next few months including: Memories, Polytonic output modules & others.

DEPT. 6CF 1020 WEST WILSHIRE BLVD. OKLAHOMA CITY, OK 73116

PERSONAL COMPUTERS FOR EDUCATION, Part I

Saturday, 9:00 AM
3 C

Marvin Winzenread, Ed.D., Section Chairperson
Mathematics Department
California State University
Hayward CA 94542

Liza Loop
LO*OP Center, Inc.
8055 Old Redwood Hwy.
Cotati CA 94928

Sharing Your Computer Hobby with the Kids

Thomas A. Dwyer
Soloworks Lab
311 Alumni Hall
University of Pittsburgh
Pittsburgh PA 15260

Personal Computing & Education:
A Time For Pioneers

Lud Braun, Professor
College of Engineering
SUNY at Stony Brook
Stony Brook NY 11794

The Things That We Can Do with a Microcomputer in Education That We Couldn't Do Before

Peter S. Grimes, Curriculum Supervisor
San Jose Unified School District
1605 Park Ave.
San Jose CA 95126

Classroom Microcomputing: How One School District Learned to Live with the State of the Art

PERSONAL COMPUTERS FOR EDUCATION, Part II

Saturday, 12:30 PM
3 C

Melvin L. Zeddies
1854 Pacific Beach Drive
San Diego CA 92109

The Construction, Operation, and Maintenance of a High School System

Bob Kahn & Lee Berman
Lawrence Hall of Science
University of California
Berkeley CA 94720

Educating People about Personal Computing:
A Major Program at the Lawrence Hall of Science

Informal Panel: Computers in Elementary & Secondary Education

Bob Albrecht, Panel Organizer
Box 310
Menlo Park CA 94025

Hal Singer
Cabrillo High School
4650 Constellation
Lompoc CA 93436

Jo Anne Ver Plank
Community Computer Center
1919 Menalto
Menlo Park CA 94025

Don Inman, Editor
Calculators / Computers
Dymax
Box 310
Menlo Park CA 94025

[More]

Your microcomputer is only as good as its memory

Your microcomputer is... in a manner of speaking... capable of thinking. The amount of information you can store, combined with the access speed, determines the bottom line capability of your microcomputer.

The Midwest Scientific Instruments' FD-8 Floppy Disk Memory System will enable you to get the most out of your microcomputer...6800 or 8080. We have the most complete 6800 disk operating system available today, which interfaces to any microcomputer via a single PIA chip.

When used with the MSI FDOS Operating System...included with purchase...the FD-8 gives your microcomputer a level of performance which can only be matched by larger computers.

You can have program save and load with named, variable length, password protected files at three levels: object code files, source code files, and BASIC files.

It has disk routines which can be used easily by low level assembler language programs as well as high level BASIC programs.

The coresident assembler/editor saves and loads source files from disk, assembles and stores object code on disk, and creates assembly listings on a high speed printer.

You get a full ANSI standard BASIC interpreter* with program load and save, from disk as well as tape, with both random and sequential disk data files. BASIC also has multi-I/O port capability under software control.

And all you need do to access any of these functions is type the appropriate commands on your terminal.

The FD-8 is complete, including all power supplies, cabinet, cables, software, manuals, and documentation.

You can order the FD-8 as a kit for $1,150.00, or wired and tested for $1,395.00.

Visit one of our dealers for a demonstration, or send for our free Catalog of MSI products.

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*MSI BASIC is an additional $65.00

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PERSONAL COMPUTERS FOR EDUCATION, Part III

Saturday, 4:00 PM
3 C

Franz J. Frederick
Education Building, Room 112
West Lafayette IN 47907

CAI Answer Processing in BASIC

Lois Noval
Noval, Inc.
8401 Aero Drive
San Diego CA 92123

Telemath

Franz J. Frederick, Assoc. Professor
Education Building, Room 112
Purdue University
West Lafayette IN 47907

Student Records Subroutine for Computer-Assisted Instruction Lessons in Extended BASIC

PERSONAL COMPUTERS FOR EDUCATION, Part IV

Saturday, 3:00 PM
3 D

Milos Konopasek & Mike Kazmierczak
School of Textile Engineering
Georgia Institute of Technology
Atlanta GA 30332

A Question-Answering System on Mathematical Models in Microcomputer Environments

Roger Broucke
Aerospace Engineering
ENL-414B
University of Texas
Austin TX 78712

Use of a Personal Computer in Engineering Education

Merl K. Miller
Matrix Publishers
207 Kenyon Road
Champaign IL 61820

The Microcomputer Education Process: Where We've Been and Some Guesses on Where We're Going

PRAMMER

by XYBEK

An extraordinary 2k memory board for your Altair-bussed computer

- ★ On-board 1702A PROM programmer
- ★ Space for 1792 bytes of read-only memory (seven 1702A EPROMs)
- ★ 256 bytes of RAM
- ★ Supplied with one 1702A, pre-programmed with stand-alone programming software — no sense switches are used
- ★ Supplied with programming power supply
- ★ PRAMMER's own on-board clock makes it compatible with almost any Altair-bussed system.
- ★ All read and write sequences are generated via an on-board micro-programmed state machine, thus eliminating all one-shots.
- ★ Complete 1702A programming in 18 seconds

COMPLETE KIT: $209
($189 through June 14, 1977)
Assembled and tested: $289
Immediate (off-the-shelf) delivery
California residents please add sales tax.
Master Charge and BankAmericard accepted.

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Booth 927

[Those interested in personal computers in education should also note the following talks:

Alice E. Ahlgren, "A New Approach to Microcomputer Systems for Education," which discusses time-sharing in an educational environment using an inexpensive microcomputer system. (see the Commercial Hardware section);

Peter J. Nelson, "The Potential of Microcomputers for the Physically Handicapped," which includes discussion of a microcomputer-based system in the classroom for the non-verbal physically disabled.]

RESIDENTIAL ENERGY & COMPUTERS

Sunday, 3:00 PM
3 C

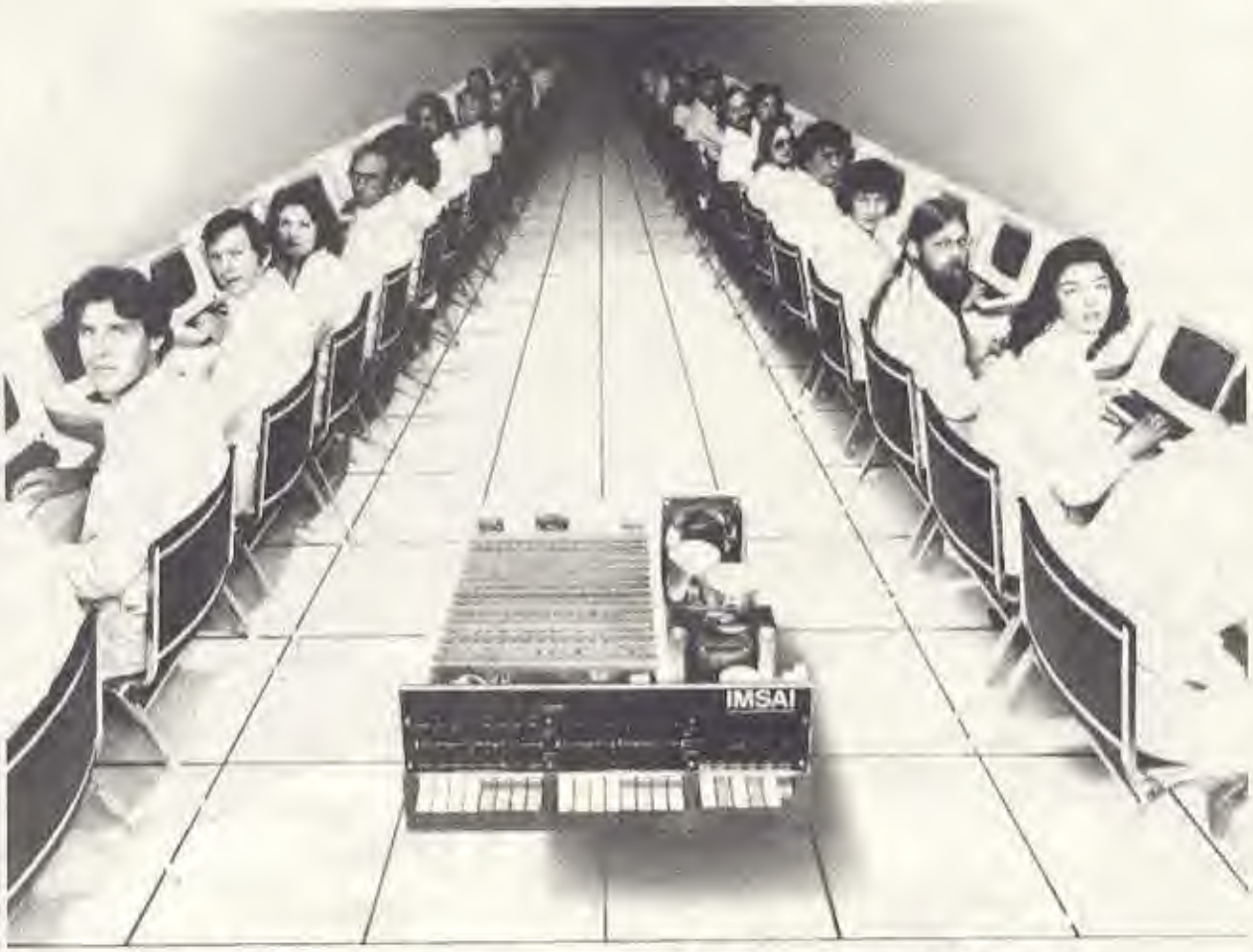
Mark Miller
821 Walnut St.
Chico CA 95926

Microcomputers: A New Era for Home Energy Management

SMOKING REGULATIONS

For ventilation, health and safety reasons, smoking is allowed only in:
1. The Main Exhibits Arena on the first floor
2. The Polk Hall Exhibits area on the first floor
3. Explicitly designated areas of the Polk Hall Cafeteria & Lounge areas
4. The audience-left half of Larkin 103 & Larkin 105 Conference Halls.

POWER.



IMSAI Introduces the Megabyte Micro.™

The Megabyte Memory

Until today, the largest memory you could fit and address in a single microcomputer CPU was 65K.

Now, IMSAI presents an incredible memory system for micros 16 times more powerful than yesterday's best.

Imagine, a full megabyte of power from sixteen 65K RAM boards.

And, to control all this, the IMSAI Intelligent Memory Manager (IMM), the super control board.

You can write protect blocks throughout the full megabyte. Or, map in 16K blocks.

Plus, preset 16 mapping configurations with protect for high speed transfer or rapid change.

All interrupts are fully vectored, and there's an interrupt if an attempt is made to write into protected memory.

There's even a real "time of day" clock.

65K, 32K and 16K RAM Boards

Until today, the most memory you could plug into a single slot was 16K.

Now, IMSAI presents memory boards in astonishing multiples of sixteen: 65K, 32K and 16K low power, dynamic RAM Boards. They can be used in any S-100 bus computer individually or in combination to form conventional systems up to 65K bytes.

Every board is fast. With "hidden refresh" and *no* "wait state."

The Complete Megabyte Microcomputer System

IMSAI is much more than a megabyte memory. It's a complete microcomputer system, dual floppy disks, terminals, plotters, printers.

IMSAI is also software. The finest peripherals and high level software available. Paper tape, Tape Cassette, and super Disk Operating Systems. Plus, BASIC and Disk BASIC with more high level languages coming.

Until today, the microcomputer's potential was just something you talked about.

Now, you can put it to work. Powerfully.

GENTLEMEN:
I'm ready to buy!
☐ Send 65K RAM Board Kit $2399 ☐ Assembled $3599
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☐ Send 16K RAM Board Kit $449 ☐ Assembled $679
☐ Send IMM RAM Control Kit $299 ☐ Assembled $399
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Termina
Computer
Termina
Computer

The first complete small computer.

As you thumb through this magazine, you'll see a lot of ads for small computers. For $600 you can find a pretty good box with a power supply, four slot mother board, CPU module, and all the expected lights and switches.

But you know what? It won't work.

That's because in order to make the computer go you have to buy memory — normally both read-write (RAM) and read-only (PROM), interfaces to the outside world (parallel, serial, and cassette), keyboard, video display module, and software.

Add this all up and it's going to cost you at least $1,400 for a complete system.

Got the picture?

Now listen to this. The remarkable new Sol-20 Terminal Computer will give you all of the above . . plus more! . . . as *standard equipment* for just $995, in kit form. This is because the Sol-20 — like no other small computer — was designed from the ground up to be complete.

Here's what the Sol-20 includes as standard equipment:

- 8080 microprocessor.
- Video display circuitry.
- 1024 words of static, low-power RAM.
- 512 words of preprogrammed PROM.
- Custom 85-key solid-state keyboard.
- Audio cassette tape interface.
- Both parallel and serial interfaces and connectors.
- Power supply.
- A beautiful case with solid walnut sides.
- Software that includes a preprogrammed PROM personality module and a cassette with BASIC-5 language plus two sophisticated computer video games.
- Full expansion capability with all S-100 bus (Altair/IMSAI/PTC bus) products.

It's a handsome terminal or computer that will even look good in your living room or office. Small systems start at just $475.

Full expansion capability

The Sol-20 system can be tailored to your applications using the complete line of peripheral products from Processor Technology. These include the video monitor, audio cassette and digital tape systems, dual floppy disc system, memories, and interfaces . . . plus all other peripherals compatible with the S-100 bus.

The Sol-20 greatly simplifies the computer-buying process. It's a splendid package that will excite both present and prospective computer owners.

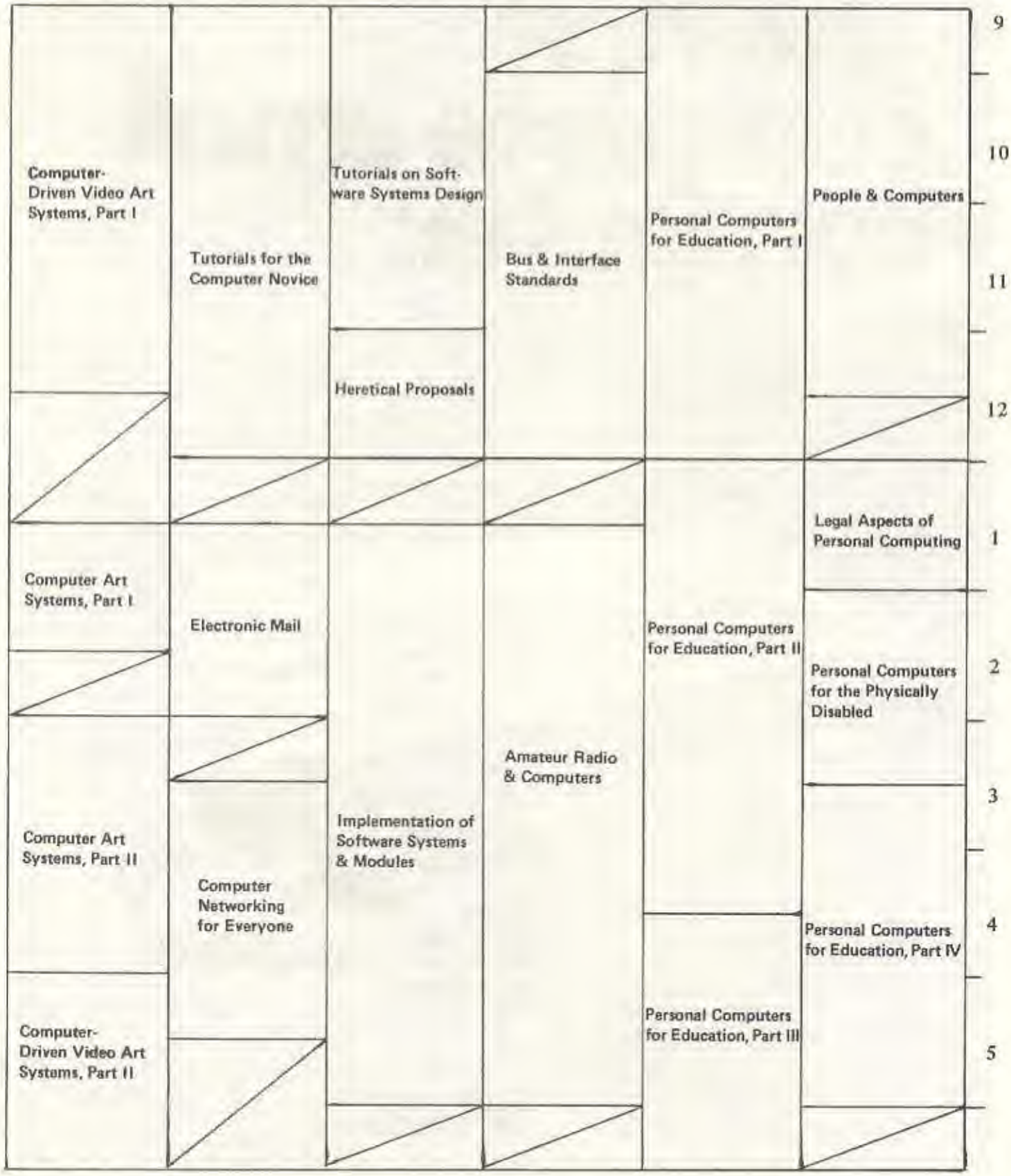
Our brochure tells all. Write for it today.

Processor Technology, Box Z,
6200 Hollis Street, Emeryville, CA 94608.
(415) 652-8080.

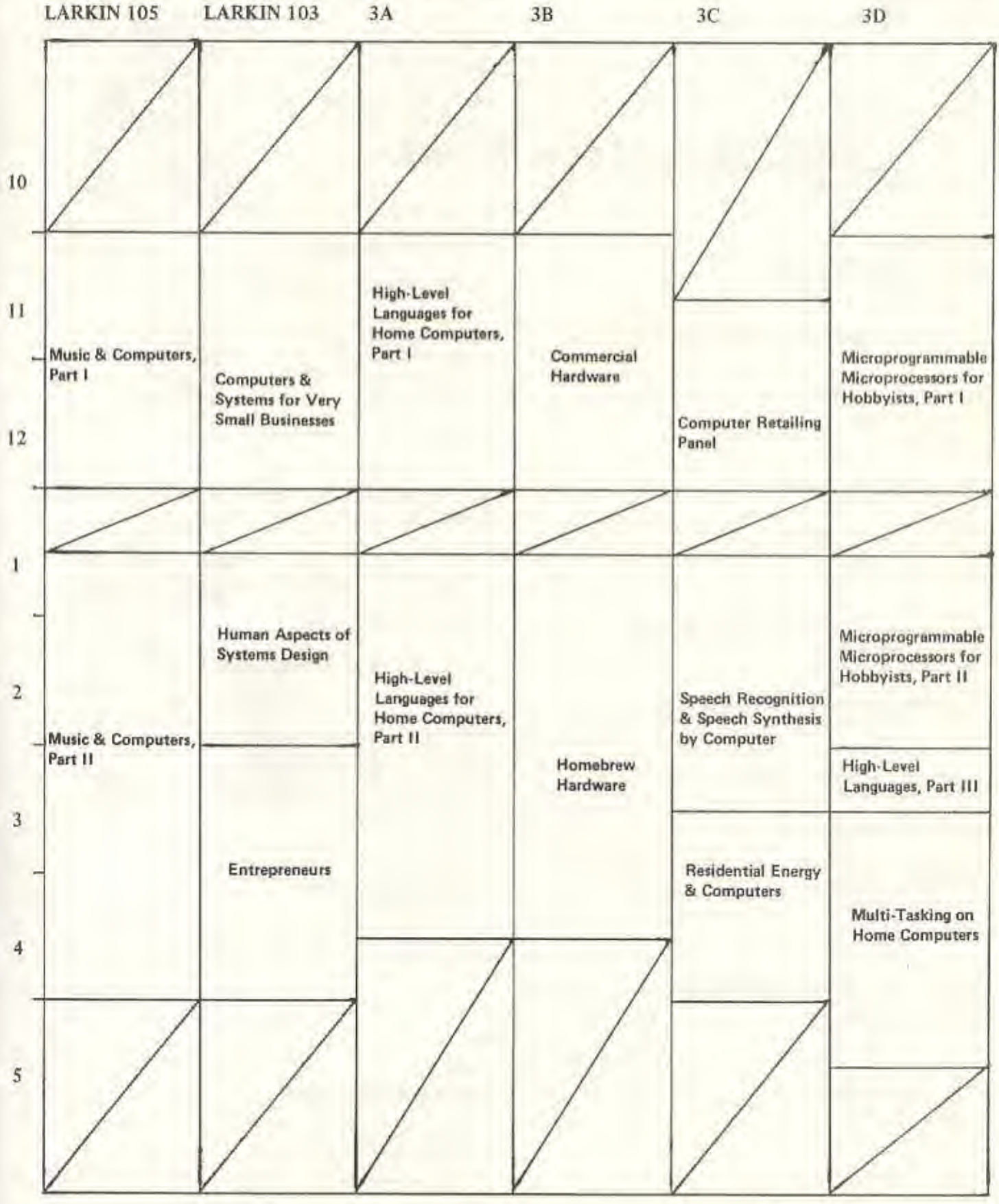
The Sol-20 expandable system.

Processor Technology Corporation

SATURDAY, APRIL 16TH



SUNDAY, APRIL 17TH



COMPUTERS & SYSTEMS FOR VERY SMALL BUSINESSES

Sunday, 10:30 AM
Larkin 103

Michael Levy
Jethro
40 Boston Post Road
Wayland MA 01778

The Emperor has Few Clothes - Applying Hobby Computer Systems to Small Business

Bob Barthelow
Microbyte Computer Systems
584 Rio Lindo Ave., Suite 4
Chico CA 95926

Microcomputer Based Small Business Systems

ENTREPRENEURS

Sunday, 2:30 PM
Larkin 103

Carl Helmers, Editor-in-Chief
BYTE Publications, Inc.
70 Main Street
Peterborough NH 03458

The Software Dilemma

Kenneth S. Widelitz, Attorney at Law, WA6PPZ
10405 Louisiana, No. 8
Los Angeles CA 90025

Tax Aspects of Lemonade Stand Computing: When is a Hobby Not A Hobby?

Walter Smith, Director of Marketing
Quantum Science Corporation
1100 Alma
Menlo Park CA 94025

Consumer Information Systems: A Merging of Data, Text, Graphics, Video & Voice

COMPUTER RETAILING PANEL

Sunday, 11:00 AM
3 C

Ray Borrill, Panel Organizer
Data Domain
406 S. College
Bloomington IN 47401

Computer Retailing

SPEECH RECOGNITION & SPEECH SYNTHESIS BY COMPUTER

Sunday, 12:30 PM
3 C

John Reykjalin & Horace Enea
Heuristics, Inc.
900 N. San Antonio Road–C1
Los Altos CA 94022

Speech Recognition Systems

D. Lloyd Rice
Box 1951
Santa Monica CA 90406

The Computer Should Speak YOUR Language

Alice Wyland Grundt, Ph.D.
Linguistics Department
California State University at Fresno
Fresno CA 93740

Structured Programming in Speech Synthesis

TUTORIALS ON SOFTWARE SYSTEMS DESIGN

Saturday, 9:00 AM
3 A

R.W. Ulrickson, President
Logical Services Incorporated
711 Stierlin Road
Mountain View CA 94043

Learning to Program Microcomputers? Here's How!

Larry Tesler
Xerox Palo Alto Research Center
3333 Coyote Hill Road
Palo Alto CA 94304

Home Text Editing

Ed Keith
655 E. Orangecrest Road
Glendora CA 91740

Structured Programming for the Computer Hobbyist

SMOKING REGULATIONS

For ventilation, health and safety reasons, smoking is allowed only in:
1. The Main Exhibits Arena on the first floor
2. The Polk Hall Exhibits area on the first floor
3. Explicitly designated areas of the Polk Hall Cafeteria & Lounge areas
4. The audience-left half of Larkin 103 & Larkin 105 Conference Halls.

GEE, YOU WOULDN'T BELIEVE HOW MANY PEOPLE I HAVE TO TELL TO KEEP THEIR HANDS OFF MY ASP SINCE I BEGAN WEARING THE OFFICIAL FIRST WEST COAST COMPUTER FAIRE T-SHIRT!!

SHOW what you KNOW!!

Whether you're in the barroom or the boardroom, you may rest assured that The Official First West Coast Computer Faire T-Shirt (official attire for the Computer Faire) will bring to your sartorial splendor. This tri-color T-Shirt (top-of-the-stack blue, Byte-thief violet, up & running orange) will amaze your friends, restore hair, and prevent bullies from kicking sand in your face if your friends are gullable, your alopecia was temporary, and you avoid beaches.

On the other back, who cares?

In separate laboratory tests, Dr Seymour Squintz (who was born outside of a log cabin in the Gaza Strip) stated: "When I go down to the beach of life [in my Official First West Coast Computer Faire T-Shirt] they may still kick sand in my mind's eye, but I see it as close for the growth of a pearl rather than for the use of Visine."

The fact that Dr Squintz subsequently and tragically incurred major cataracts, vehemently denied he was an ardent voyeur, and accidentally committed reverse self-defenestration, is, of course, unfortunate. And we will probably stop using his testimonial.

In the meantime, whether you're a shareholder or a sharecropper, on the board of directors or simply bored of directors, buy a gross of these discreet garments, and flout them proudly. Equally at home under a motorcycle jacket or a Brooks Brothers, the Computer Faire T-Shirt will positively make you look stunning. Or maybe stunned.

In any case, keeping in mind that you are what you wear, and that, though this T-Shirt may be taken to the cleaners, you never will be, we think you will agree that the proposed investment of $4 a shirt is modest, at least compared to this solicitation!

AFTER WEARING THIS T-SHIRT, THEY BANNED DATA BUSING IN BOSTON.

So, order generously. For as we sew, you shall reap.

(Please note: Because this is a limited edition, Officials from the Franklin Mint will, at an unspecified time, uproot our cotton plants, shred our silkscreen, and set our copy on fire adrift on a small raft, blindfolded, in downtown Billings, Montana.)

If you want to Act Now!, contact the Actors' Guild. If you merely want to set the stage, then buy the Computer Faire T-Shirt.

YES!! Send to me immediately (as ordered) The Official First West Coast Computer Faire T-Shirt(s). I understand they are additionally fabulous for their unique property of both cradling the wearer, and swaddling bystanders--innocent and guilty alike--with exquisite envy. (So that Computer Faire may prepare legal defense for actionable horripilatory incitement, please indicate your first intended bystander:
( ) Yves St Laurent, ( ) EE professor who flunked me, ( ) boss, ( ) janitor, ( ) janitor's tax accountant, ( ) maître d' at MacDonald's, ( ) cat, ( ) computer club executive council, ( ) tech rep, ( ) cheeky proctologist, ( ) _____

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CALIFORNIA RESIDENTS ADD 6% TAX _____

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STATE_____ ZIP_____

THE FIRST WEST COAST COMPUTER FAIRE
A Conference & Exposition on Personal & Home Computers

BOOTH 425

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WRITE and READ
EPROM
1702A and 2708

- Plugs Directly into your ALTAIR-IMSAI Computer
- Includes Main Module Board and External EPROM Socket Unit
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- Software included
- No External Power Supplies. Your Computer does it all
- Programs and Reads Both 1702A and 2708 EPROMS
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KIT COMPLETE — $165
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QUALITY Support for those who wish to dig deeply into digital design.

Breadboarding System, textbook on logic design, and complete schematics for an elegant CPU that will run the PDP8 instruction set . . $1095

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THE NATIONS MOST INFORMATIVE, WELL SUPPLIED
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- Automatic answer modem. Allows KISS System to automatically answer incoming telephone calls from remote terminals or computers. Remote terminals & devices use KISS as if they were connected directly. Password protection for programs, associated files, list protection and additional system security features are also provided.

KISS SYSTEM 70 Includes

- Kiss complete computer system with 32K memory, automatic monitor and interconnections to operate the following;
- Heavy duty general office or industrial Keyboard & Display unit with keys for all letters, numbers and special letters needed with separate numeric entry keypad and many other features.
- Dual floppy disc sytem & controller with dual DOS and 600,000 Bytes of random access storage (expandable to 4 floppys).
- Printer with 132 columns, upper case & lower case letters, carbon or fabric ribbon, multiple type styles, conventional solid print, (keyboard is low cost option).
- Dual cassette controller.
- 12K Basic language.
- Coresident editor/assembler.
- Full disc files capabilities.
- Several self-teaching business programs including many games.
- Thorough documentation.
- Diagnostics.
- Custom computer table.

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PRAIRIE VIEW, ILLINOIS 60069
TELEPHONE: (312) 634-0076

IMPLEMENTATION OF SOFTWARE SYSTEMS AND MODULES

Saturday, 1:00 PM

3 A

Dennis Allison, Consultant
169 Spruce
Menlo Park CA 94025

An Interpretive Approach to Implementing Programming Languages

W. Kahan
Dept. of Electrical Engineering & Computer Science
University of California
Berkeley CA 94720

Floating Point Arithmetic - How to Get the Wrong Answer Sooner

Roy Rankin
2273 St. Francis Drive
Palo Alto CA 94303

Numerical Calculations on Microprocessors

Dennis Burke
4042 W. 139th Street No.7
Hawthorne CA 90250

Modular Relocatable Code

David D. Sheretz
Medical Information Sciences
University of California Medical Center
San Francisco CA 94143

An Implementation Technique for MUMPS

HIGH LEVEL LANGUAGES FOR HOME COMPUTERS, Part I

Sunday, 10:30 AM

3 A

Kenneth B. Welles II, Ph.D.
2823 Fenwick Road
University Heights OH 44118

Fortran for Your 8080

Tom Pittman
Box 23189
San Jose CA 95153

Computer Languages: The Key to Processor Power

HIGH LEVEL LANGUAGES, Part II

Sunday, 1:00 PM

3 A

Martin Buchanan
2040 Lord Fairfax Road
Vienna VA 22180

Design and Implementation of HI

John A Starkweather, Director
Computer Center
University of California Medical Center
3rd and Parnassus
San Francisco CA 94143

A PILOT Interpreter for a Variety of 8080-Based Systems

Jef Raskin
Box 511
Brisbane CA 94005

New Languages for Micros: A Discussion

HIGH LEVEL LANGUAGES FOR HOME COMPUTERS, Part III

Sunday, 2:30 PM

3 D

Bob Wallace
Box 5415
Seattle WA 98105

EMUL-8: An Extensible Microcomputer User's Language

MULTI-TASKING ON HOME COMPUTERS

Sunday, 3:00 PM

3 D

Bob Wallace
Box 5415
Seattle WA 98105

EMOS-8: An Extensible Microcomputer Operating System

Joseph G. McCrate
Cromemco, Inc.
2432 Charleston
Mountain View CA 94043

A New Approach to Time-Sharing with Microcomputers

George Pilipovich
MVT Microcomputer Systems, Inc.
Box 62
Agoura CA 91301

Microcomputers and Multi-Tasking: A New Dimension in Personal Computing

HOMEBREW HARDWARE

Sunday, 1:00 PM
3 B

Kenneth B. Welles II, Ph.D.
2623 Fenwick Road
University Heights OH 44118

A Floppy Disk Controller for Under $50

Carl Townsend
Center for the Study of the Future
4110 N.E. Alameda
Portland OR 97212

Interfacing a Selectric to Your Computer

Robert A. Tuttle, Jr.
Medical Methods Research
3700 Broadway
Oakland CA 94611

A Fault Isolation Troubleshooting System for the Multi Vendor Environment

William J. Schenker, M.D.
2086 Essenay Ave.
Walnut Creek CA 94596

Solenoids Provide Software Control of a Home Cassette Recorder

BUS & INTERFACE STANDARDS

Saturday, 9:00 AM
3 B

Tony Pietsch
Proteus Engineering
1717 E. Oakdale Ave.
Pasadena CA 91106

Standardization of the S-100 Bus: Timing and Signal Relationships - a Proposed Standard

Ceasar Castro & Allen Heaberlin
295 Surrey Place
Bonita CA 92002

A Microprocessor Independent Bus

Gary McCray
188 Western Avenue
Livermore CA 94550

16-Bit and 32-Bit Adaptations of the S-100 Bus Standard

William J. Schenker, M.D.
2086 Essenay Avenue
Walnut Creek CA 94596

A Biomedical Application Using the S-100 Bus Standard

James T. Walker
64F Escondido Village
Stanford CA 94305

DMA Operation Protocol in the S-100 Bus Environment

ADDRESSES OF CO-SPONSORS OF THE FAIRE

Homebrew Computer Club
Box 626
Mountain View CA 94042

Southern California Computer Society
Box 5429
Santa Monica CA 90405

San Francisco Peninsula ACM* Chapter
Box 60355
Sunnyvale CA 94088

Golden Gate ACM* Chapter
Box 26044
San Francisco CA 94126

Santa Clara Valley IEEE-CS* Chapter
701 Welch Road No. 2210
Palo Alto CA 94304

California Mathematics Council
3360 Tonga Lane
Alameda CA 94501

Electrical Engineering Department
Stanford University
Stanford CA 94305

Lawrence Hall of Science
University of California
Berkeley CA 94720

People's Computer Company
Box E
Menlo Park CA 94025

Community Computer Center
1919 Menalto
Menlo Park CA 94025

Bay Area Microcomputer Users Group
1211 Santa Clara Avenue
Alameda CA 94501

Professional & Technical Consultants Assn.
1 First Street
Los Altos CA 94022

Amateur Research Center
Space Science Center
Foothill College
Los Altos CA 94022

*ACM: Association for Computing Machinery
IEEE-CS: Institute of Electrical & Electronics Engineers - Computer Society

ROM
COMPUTER APPLICATIONS FOR LIVING

FREE DIGITAL FOAM!
As a Faire special, we are giving away an experimenter's sample of digital foam (Dynacon "C") to each of the first 200 buyers of a ROM subscription. Come to Booth 9 early. With only 200 samples available, they're not going to last long.

The magazine that actually tells you what to do with your personal computer

ROM is the magazine that helps you *use* your personal computer. Computer games are lots of fun, but there's another whole big world out there. Computer-controlled environments from bathrooms to greenhouses, solar home energy, semirobotic servomechanisms—even the real robot—you'll find them all in ROM.

There's computer aid for the handicapped, instant video home news, voice control that really talks, practical software you can use right now, graphics, puzzles—yes, games too. And lots more every month . . .

ROM opens the door with simple solutions to complicated problems, the best in new peripherals, and great ideas on what to do with it all from Bill Etra, Lee Felsenstein, Avery Johnson, Theodor Nelson, Frederik Pohl, Andrew Singer, Alvin Toffler, Joseph Weizenbaum, Hesh Wiener, and the rest of the top writers in the field.

Coming Up in ROM

- Why Can't a Computer Be More Like a Man?
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ROM Helps

Check out where microcomputing is headed in Bill Etra's "ROMifications" column. Then find out why your machine doesn't return your tender loving care in Andrew Singer's column, "The Human Factor." You won't be able to pass up that perennial pea-in-the-Princess-Computer-Company's-mattress, Theodor Nelson, as he keeps the outfit from going to sleep with "The Missionary Position" . . .

Other special regular features include "ROMdiscs," "ROMtutorials" (which lead the novice gently through the maze of microcomputing), "PROMpuzzles," and "floppyROMs," not to mention lots of surprises every month. And if you have questions, or something to tell us, you get your chance regularly in the "Reader Interrupt" column.

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Microprogramming for the Hobbyist

David C. Wyland
Raytheon Semiconductor
350 Ellis St.
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Large Scale Computers for the Hobbyist

MICROPROGRAMMABLE MICROPROCESSORS FOR HOBBYISTS, Part II

Sunday, 1:00 PM
3 D

Tom Pittman & Bob Davis
Box 23189
San Jose CA 95153

VACuuM: A Variable Architecture Computing Machine

John R. Mick
Advanced Micro Devices
901 Thompson Place
Sunnyvale CA 94086

Bipolar Microprocessor Microphobia

PRE-NCC COMPUTER CLUB LEADERS PLANNING SESSION

Sunday, 12:00 noon
Room 328

Session Organizer: Rich Kuzmack, President
Chesapeake Microcomputer Club, Inc.
Box 87
McClean VA 22101

TOPIC-ORIENTED SOCIAL CENTERS

Please note that the Lounge area of Polk Hall includes topic-oriented areas for those wishing to meet and discuss particular topics from the world of personal computers. Wander in; sit down; relax a bit, and see what sort of interesting conversations develop. The topics include:

Computers for People, and Computer Dilettantes
Art, Music, and Computers
Computer Hardware & Software
Radio, Computers, and Networking
Legal & Business Aspects of Personal Computers

AMATEUR RADIO & COMPUTERS

Saturday, 1:00 PM
3 B

Richard Sherman, Ph.D., Section Organizer
10595 Orange Tree Lane
Cupertino CA 95014

Robert C. Brehm
Promedics Data Corporation
Box 7454
Menlo Park CA 94025

Ham RTTY: Its Evolution and Future

Clayton W. Abrams, K6AEP
1758 Comstock Lane
San Jose CA 95124

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Ivar Sanders, W6JDA
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CONFERENCE REFEREES

The Computer Faire would like to express its sincere thanks for the time and effort expended by the following individuals in refereeing the multitude of papers and abstracts that were submitted to be considered for presentation in the Conference activities at the Faire.

Committee of Referees

Phyllis Cole, Editor, *People's Computer Company*
Marc Le Brun, Personal Computers Editor, *Co-Evolution Quarterly*
Bob Reiling, Editor, *Homebrew Computer Club Newsletter*, & Computer Faire Operations Coordinator
Larry Tesler, Xerox Palo Alto Research Center
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Jim Warren, [ex-officio member] Editor, *Dr. Dobb's Journal of Computer Calisthenics* & Computer Faire Chairperson

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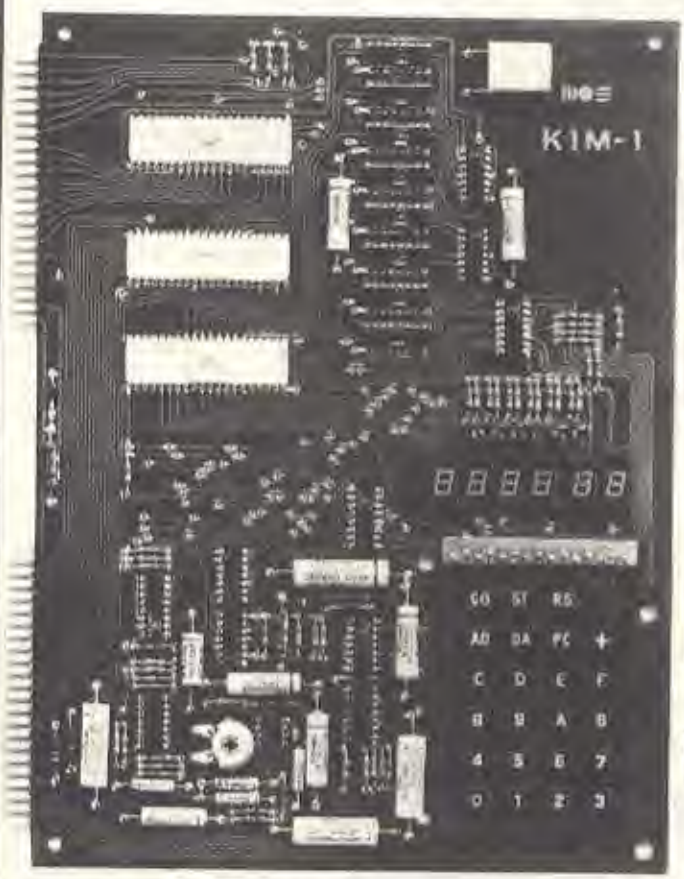

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Sunday, 10:00 AM
Room 328

John Marshall, Session Organizer
Box 242
Renton WA 98055

Content of Newsletters

Joel Miller
Fairchild Semiconductor
M/S 14-1055
464 Ellis St.
Mountain View CA 94042

Preparation of Articles

Brent Sack, Art Director
Laurel Publications
18385 Main Blvd.
Los Gatos CA 95030

Preparation of Camera-Ready Copy

Bob Wallace
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Seattle WA 98105

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Sunday, April 17th:

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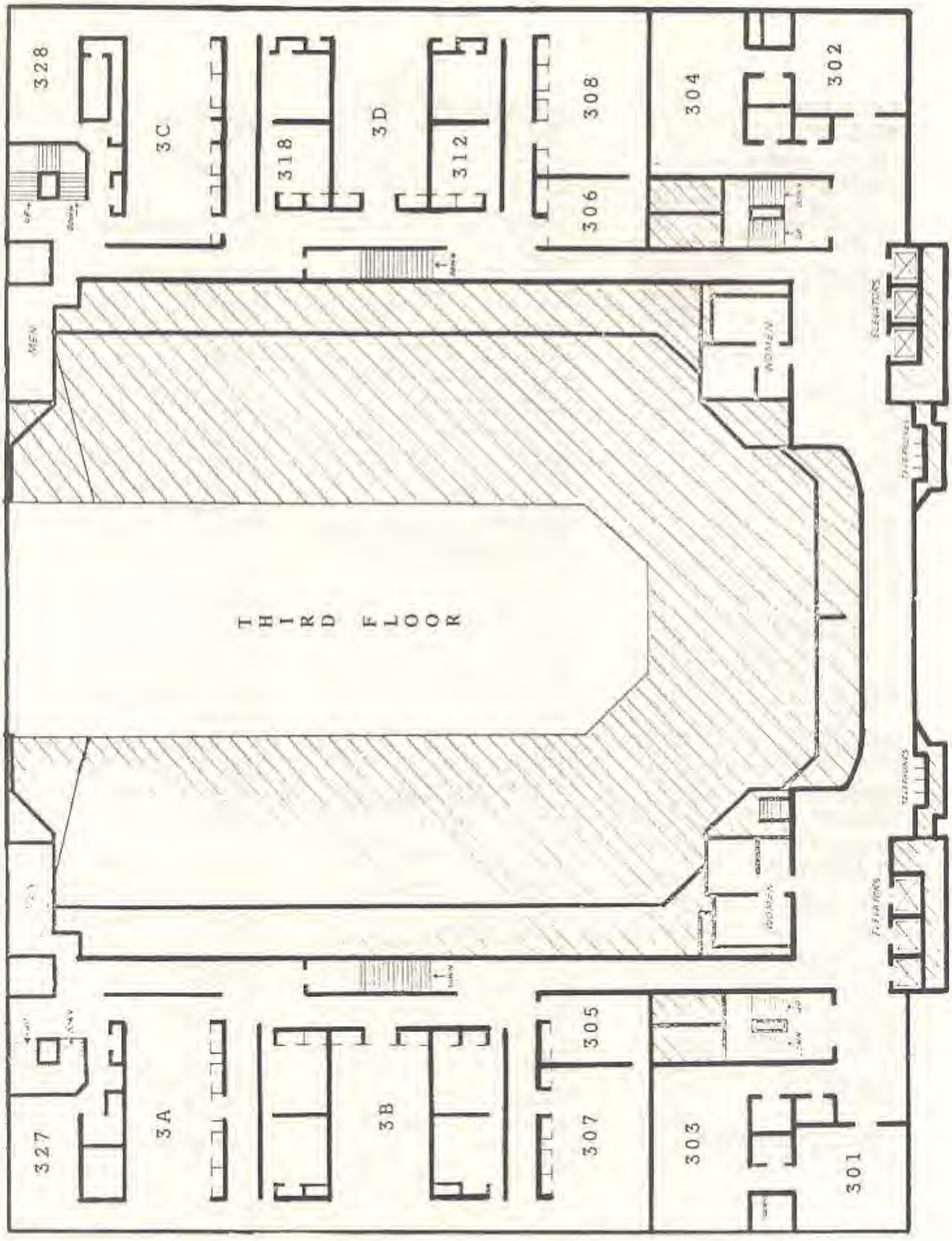
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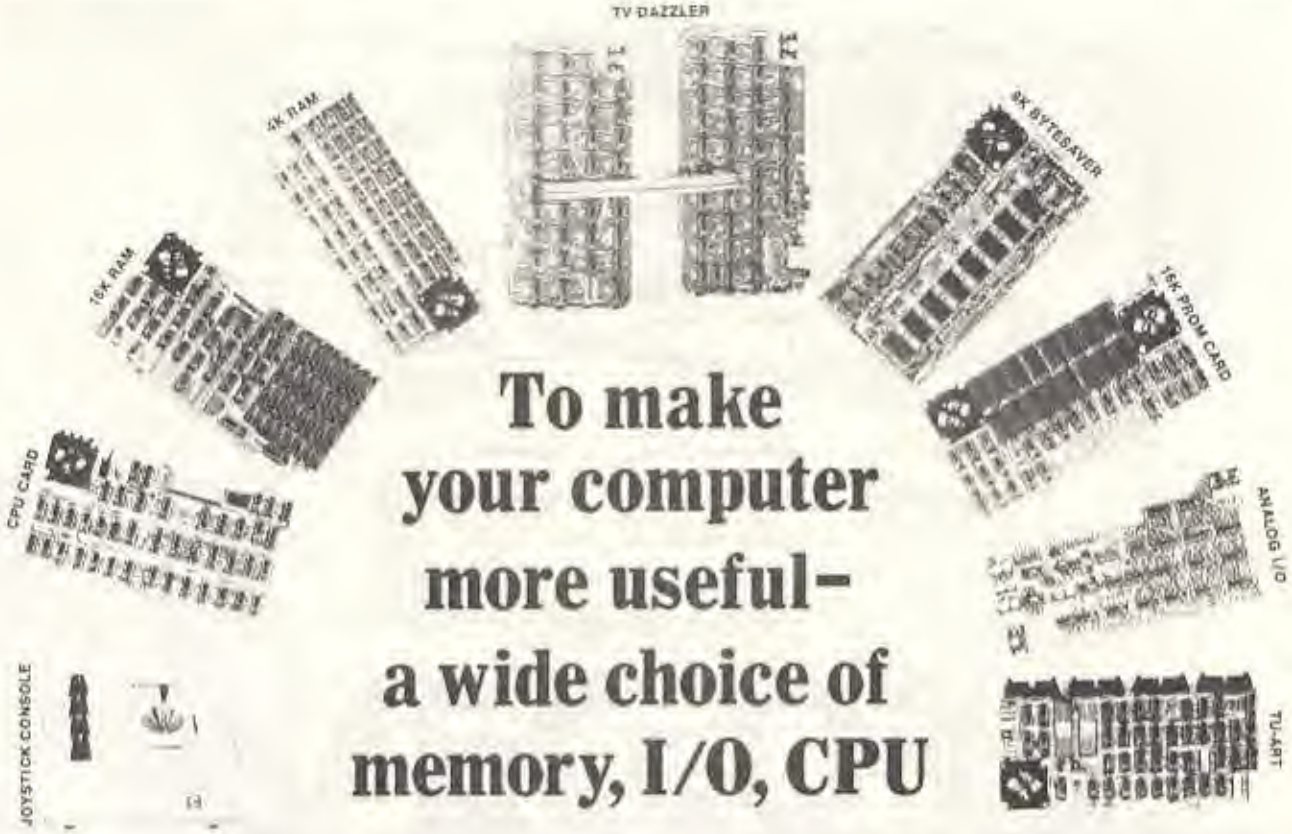

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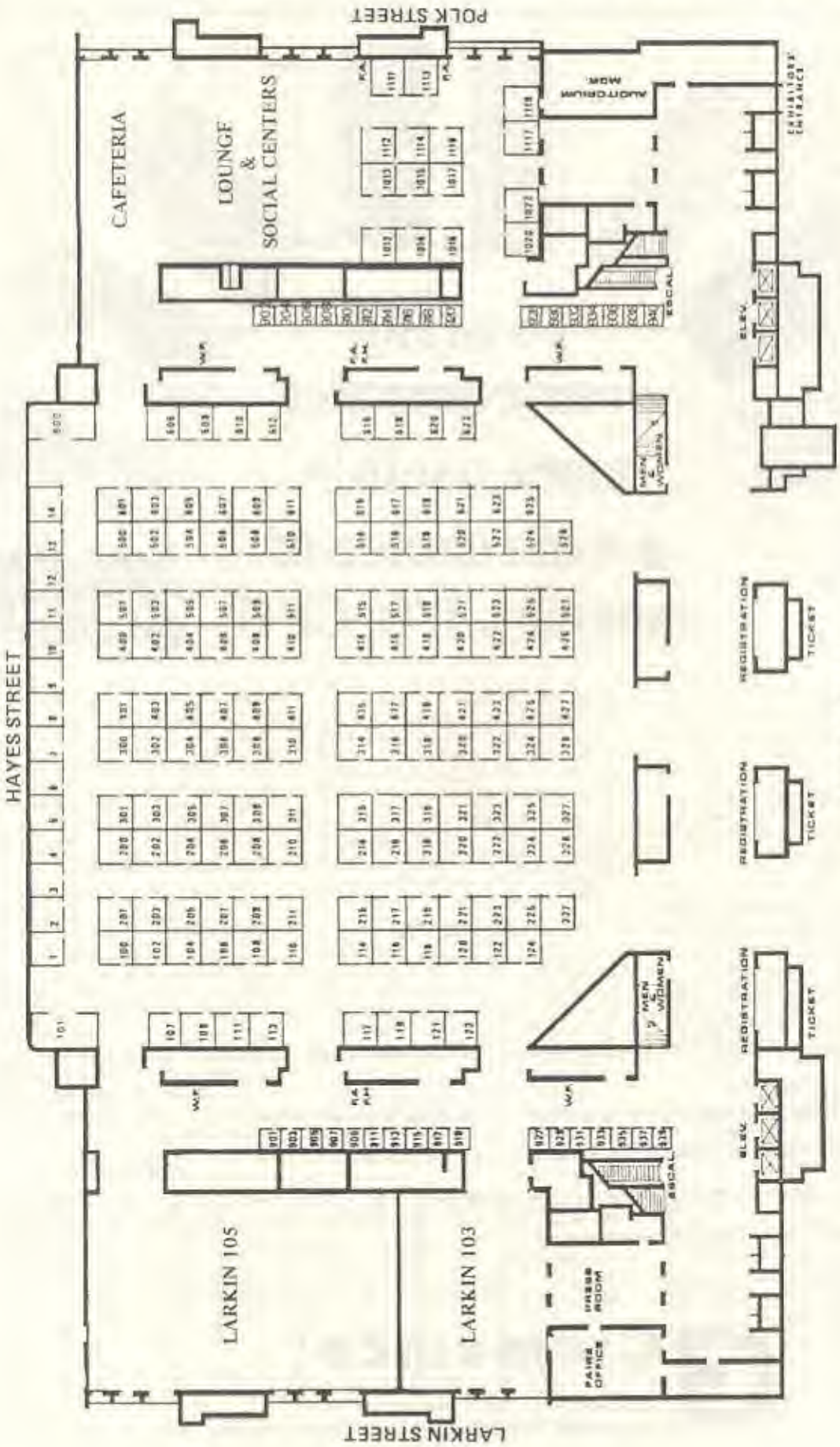
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It's a two touch affair

VECTOR 1

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